

LEPIDOPTERA OF THE M'ZAB COUNTRY, SOUTH ALGERIA,
COLLECTED BY DR. ERNST HARTERT AND CARL
HILGERT IN 1914.*

By LORD ROTHSCILD, F.R.S., PH.D.

RHOPALOCERA

PAPILIONIDAE

Papilioninae

1. *Papilio machaon saharae* Oberth.

Papilio machaon var. *saharae* Oberthür, *Etud. d'Entom.* iv. p. 68. sub. No. 192 (1879) (Laghout).

1 ♀, Oued Nça, April 16-30 (1914); 2 ♂♂, 1 ♀, Ghardaia, May 1-3 (1914).

Pierinae

2. *Teracolus दौरا nouna* (Luc.)

Anthocharis nouna Lucas, *Explor. Scient. d'Algérie, Zool.* iii. p. 350. No. 14. t. 1. f. 2 (1849) (Algeria).

17 ♂♂, 4 ♀♀, Ghardaia, May 1-3 (1914).

3. *Pieris daphidice albidice* Oberth.

Pieris daphidice var. *albidice* Oberthür, *Etud. d'Entom.* vi. p. 47 (1881) (Algeria).

2 ♂♂, Ghardaia, May 1-3 (1914).

NYMPHALINAE

4. *Pyrameis cardui cardui* (Linn.)

Papilio cardui Linnaeus, *Fauna Suecica*, p. 276. No. 1051 (1761) (Sweden).

This species was as usual very abundant, but the bulk of the specimens were small.

2 ♂♂, Oued Nça, April 16-30 (1914).

5. *Melitaea didyma harterti* Rothschild.

Melitaea didyma harterti Rothschild, *Nov. Zool.* xx. p. 115. No. 13 (1913) (El Hadadra).

4 ♂♂, 1 ♀, Ghardaia, May 1-3 (1914).

LYCAENIDAE

6. *Tarucus theophrastus theophrastus* (Fabr.)

Hesperia theophrastus Fabricius, *Entom. System.* iii. p. 281. No. 82 (1793) (Morocco).

13 ♂♂, 8 ♀♀, Ghardaia, May 1-3 (1914).

* For particulars of localities see *antea*, pp. 61-4.

HETEROCERA

SPHINGIDAE

Choerocampinae

7. *Celerio euphorbiae deserticola* (Bartel)

Deilephila mauretunica ab. *deserticola* Bartel, in *Rühl, Palaearkt. Grossschmett.* ii. p. 79 (1899) (Mauretania).

Only the one specimen seen.

1 ♀, Oued Nça, April 16-30 (1914).

8. *Celerio lineata livornica* (Esp.)

Sphinx livornica Esper, *Schmett.* ii. p. 196 (1779) (Europe).

Very abundant but mostly worn.

1 ♂, 1 ♀, Oued Nça, April 16-30 (1914).

LYMANTRIIDAE

9. *Albarracina warionis warionis* (Oberth.)

Bombyx warionis Oberthur, *Etud. d'Entom.* vi. p. 75. t. ii. f. 6 (1881) (Oran).

1 ♀, El Alia, between Touggourt and Guerrara, April 12 (1914).

NOCTUIDAE

Agrotinae

10. *Chloridea nubigera* (Herr.-Sch.)

Heliothis nubigera Herrich-Schäffer, *Syst. Bearb. Schmett. Eur.* ii. p. 366 (1845) (Europe).

4 ♂♂, 4 ♀♀, Oued Nça, April 16-30; 1 ♂, Ghardaia, May 1-3 (1914).

11. *Timora albida* Hampson.

Timora albida Hampson, *Ann. Mag. Nat. Hist.* (7) xv. p. 450. No. 197a (1905) (Hammam-es-Salahin).

2 ♀♀, Hassi Dinar, south of Touggourt, April 11; 4 ♂♂, 4 ♀♀, El Alia, between Touggourt and Guerrara, April 12; 3 ♂♂, El Arich, east of Guerrara, April 13; 1 ♂, Hassi Sidi Mahmud, between El Arich and the Oued Nça, April 14; 1 ♂, Oued Nça, April 16-30 (1914).

The late Mr. Warren and others have confused this very distinct species with *Oria* (*Argyrospila*) *striata* Stand.

12. *Euxoa oranaria* (Bang-Haas)

Agrotis oranaria Bang-Haas, *Iris*, xix. p. 133. pl. v. f. 9 (1906) (Sud Oranais).

12 ♂♂, 11 ♀♀, Oued Nça, April 16-30 (1914).

13. *Euxoa mauretunica* (Bang-Haas)

Agrotis mauretunica Bang-Haas, *Iris*, xxiv. p. 36. pl. 3. f. 4 (1910) (Süd-Oran).

12 ♂♂, 28 ♀♀, Oued Nça, April 16-30 (1914).

14. *Euxoa radius* (Haw.) (= *puta* Hübn. et auct.)*Bombyx radius* Haworth, *Lepid. Brit.* p. 119 (1809) (England).

2 ♂♂, Oued Nça, April 16-30 (1914).

15. *Agrotis ypsilon* (Rott.)*Noctua ypsilon* Rottenburg, *Naturforscher*, ix, p. 41 (1776) (Europe).

22 ♂♂, 19 ♀♀, Oued Nça, April 16-30 (1914).

16. *Lycophotia photophila ignipeta* (Oberth.)*Agrotis ignipeta* Oberthur, *Etud. d'Entom.* i. p. 45. t. iv. f. 4 (1876) (Oran).Differs from typical *photophila* in its paler hindwings and more distinct yellowish transverse bands on forewings.

3 ♂♂, Oued Nça, April 16-30; 1 ♀, Ghardaia, May 1-3 (1914).

(25 ♂♂ and ♀♀, May 1-15 (1913), Ain Sefra, Sud Oranais, W. R. & E. H.)

Hadeninae17. *Scotogramma trifolii farkasii* (Treitsch.)*Noctua farkasii* Treitschke, *Schmetz. Europ.* x. pt. 2. p. 74 (1835) (Europe).

6 ♂♂, 9 ♀♀, Oued Nça, April 16-30 (1914).

18. *Scotogramma treitschkei* (Boisd.)*Hadena treitschkei* Boisdual, *Ann. Soc. Linn. Paris*, 1827, p. 111. pl. 6. f. 2 (South France).

5 ♂♂, 3 ♀♀, Oued Nça, April 16-30 (1914).

19. *Odontelia griseola* Rothschild.*Odontelia griseola* Rothschild, *Nor. Zool.* xx. p. 121. No. 37 (1913) (Mraier).

1 ♂, Hassi Dinar, S. of Touggourt, April 11 (1914).

Cucullianae20. *Copiphana gafsana* (Blachier)*Cleophana gafsana* Blachier, *Bull. Soc. Entom. France*, 1905. p. 53 (Gafsa, Tunis).4 ♂♂, 3 ♀♀, ab. *albina*, Oued Nça, April 16-30 (1914).21. *Cleophana vaulogerii* Stand.*Cleophana vaulogerii* Standinger, *Iris*, xii. p. 378. pl. v. f. 9 (1899) (Biskra).

2 ♂♂, 2 ♀♀, Oued Nça, April 16-30 (1914).

22. *Cleophana fatima* Bang-Haas*Cleophana fatima* Bang-Haas, *Iris*, xx. p. 73. t. iii. f. 14 (1907) (Gafsa, Tunis).

1 ♀, Oued Nça, April 16-30 (1914).

23. *Cleophana chabordis* Oberth.

Cleophana chabordis Oberthür, *Etud. d'Entom.* i. p. 47. pl. ii. f. 2 (1876) (Bou Saada).

About half this huge series is ab. *albicans* and intermediates.

1 ♂, El Alia, between Touggourt and Guerrara, April 12; 1 ♀, El Arich, E. of Guerrara, April 13; 24 ♂♂ and ♀♀, Hassi Sidi Mahmud, between El Arich and Oued Nça, April 14; 306 ♂♂ and ♀♀, Oued Nça, April 16-30 (1914).

24. *Metapoceras omar* (Oberth.)

Cleophana omar Obertbur, *Bull. Soc. Entom. France*, 1887, p. 57 (Oued Leber, Tunis).

1 ♂, 1 ♀, Oued Nça, April 16-30 (1914).

25. *Harpagophana picturata* (Rothsch.)

Cleophana picturata Rothschild, *Entom. Zeitsch.* xxiii. p. 142 (1909) (Mraier).

The present specimen is the fourth recorded in five years, so that the species must be very rare.

1 ♀, Oued Nça, April 16-30 (1914).

26. *Criophasia albolineata* (Blachier)

Calophasia albolineata Blachier, *Bull. Soc. Entom. France*, 1905, p. 53 (Gafsa, Tunis).

1 ♀, Oued Nça, April 16-30 (1914).

27. *Calophasia kraussi* Rebel

Calophasia kraussi Rebel, *Verh. zool. bot. Gesell. Wien*, 1895, p. 348 (Ouargla).

All intergradations, except ab. *brunnea*, occur in this series between typical *kraussi* and ab. *albo-ochracea*, and one is entirely white.

1 ♂, 1 ♀, El Alia, between Touggourt and Guerrara, April 12; 3 ♀♀, El Arich, E. of Guerrara, April 13; 25 ♂♂ and ♀♀, Oued Nça, April 16-30 (1914).

Acronyctinae**28. *Iambiodes incerta* (Rothsch.)**

Bryophila incerta Rothschild, *Nov. Zool.* xx. p. 125. No. 51 (1913) (Oued Nça).

3 ♂♂, 2 ♀♀, Oued Nça, April 16-30 (1914).

29. *Laphigma exigua junceti* (Zell.)

Curadrina junceti Zeller, *Iris*, 1847, p. 445 (Spain).

4 ♂♂, 9 ♀♀, Oued Nça, April 16-30 (1914).

30. *Rabinopteryx subtilis* (Mab.)

Epimecia subtilis Mabile, *Bull. Soc. Entom. France*, 1888, p. 51 (Gabès, Tunis).

3 ♀♀, Oued Nça, April 16-30 (1914).

31. *Athetis clavipalpis* (Scop.)

Phalaena clavipalpis Scopoli, *Entom. Carn.* p. 213 (1763) (Carniola).

1 ♂, Oued Nça, April 16-30 (1914).

32. *Athetis oberthuri* Rothsch.

Athetis oberthuri Rothschild, *Nov. Zool.* xx. p. 126. No. 57 (1913) (South Oued Mya).

1 ♂, 1 ♀, Oued Nça, April 16-30 (1914).

33. *Athetis approximans* Rothsch.

Athetis approximans Rothschild, *Nov. Zool.* xxi. p. 334. No. 187 (1914) (Guelt-es-Stel).

The capture of this insect in April finally settles any doubt that may have been felt that it could be the autumn brood of *flava* Oberth.

3 ♂♂, Oued Nça, April 16-30 (1914).

Erastrinae34. *Eublemma mozabitica* Rothsch.

Eublemma mozabitica Rothschild, *Nov. Zool.* xix. p. 126. No. 5 (1912) (Ghardaia).

3 ♀♀, Oued Nça, April 16-30 (1914).

35. *Eublemma albivestalis* Hmps.

Eublemma albivestalis Hampson, *Cat. Lepid. Phal. Brit. Mus.* x. p. 191. No. 592. pl. cliv. f. 25 (1910) (Palestine, Dead Sea) = *Talpocharaxes vestalis* Standinger, *Iris*, xii. p. 385 (1899) (Nom. praecoc.).

2 ♀♀, Oued Nça, April 16-30 (1914).

36. *Eublemma wollastoni* N. C. Rothsch.

Eublemma wollastoni N. C. Rothschild, *Nov. Zool.* viii. p. 430. No. 27 (1901) (Shendi).

3 ♀♀, Oued Nça, April 16-30 (1914).

37. *Eublemma lacteola* Rothsch.

Eublemma lacteola Rothschild, *Nov. Zool.* xxi. p. 339. No. 210 (1914) (Guelt-es-Stel).

1 ♂, 3 ♀♀, Oued Nça, April 16-30 (1914).

38. *Eublemma ernesti* sp. nov.

♂♀. Antennae above white, below amber-brown; head, thorax, and abdomen white.

Forewing: white; a grey spot at end of cell, a submarginal row of minute black dots.

Hindwing: creamy white.

Length of forewing: 11-12.5 mm.

Expanse: 25.5-28.5 mm.

2 ♂♂, 4 ♀♀, Oued Nça, April 16-30 (1914) (♀ Type).

39. *Eublemma conistrotata* Hmps.

Eublemma conistrotata Hampson, *Cat. Lepid. Phal. Brit. Mus.* x. p. 192. No. 5296. pl. cliv. f. 29 (1910) (Quetta, Beluchistan).

1 ♀, Hassi Dinar, South of Tougourt, April 11; 2 ♀♀, El Alia, between Tougourt and Guerrara, April 12; 1 ♀, El Arich, east of Guerrara, April 13; 1 ♂, 2 ♀♀, Hassi Sidi Mahmud, between El Arich and the Oued Nça, April 14; 3 ♂♂, 2 ♀♀, Oued Nça, April 16-30 (1914).

40. *Tarache biskrensis* (Oberth.)

Acontia biskrensis Oberthür, *Bull. Soc. Entom. France*, 1887, p. 58 (Biskra).

This species is almost as variable in the amount of white on wings and body as *T. lucida* (Hufn.).

1 ♂, 3 ♀♀, El Alia, between Touggourt and Guerrara, April 12; 2 ♂♂, 6 ♀♀, Hassi Sidi Mahmud, between El Arich and the Oued Nça, April 14; 2 ♂♂, 12 ♀♀, Oued Nça, April 16-30 (1914).

41. *Tarache lucida* (Hufn.)

Noctua lucida Hufnagel, *Berlin. Mag.* iii. p. 302 (1776) (Berlin).

2 ♂♂, Oued Nça, April 16-30 (1914).

Catocalinae

42. *Anydrophila sabourodi* (Luc.)

Palpangula sabourodi Lucas, *Bull. Soc. Entom. France*, 1907, p. 180 (Zarcine, Tunisia).

These two specimens are the first to be recorded from Algeria, and, together with the type and a ♂ from Aseksen, north of the Hoggar Mountains, collected by Herr Geyr von Schweppenburg (also in the Tring Museum) are the only specimens recorded of this species.

2 ♂♂, Oued Nça, April 16-30 (1914).

43. *Cerocala algeriae* Oberth.

Cerocala scapulosa var. *algeriae* Oberthür, *Etud. d'Entom.* i. p. 55. pl. iv. f. 7 (1876) (Bou Saada).

Both the late Mr. W. Warren and Sir George Hampson have retained *scapulosa*, *insana*, and *sana* as three distinct species, while in the *Staudinger-Rebel Catalogue* they are treated as three forms of one species. Dr. Jordan has examined the Algerian forms for me and found that *insana* Herr.-Sch., and *sana* Stand. are certainly distinct species both from *scapulosa* and each other—differing in their antennae and genitalia as well as in marking. Now both Warren and Hampson have identified *algeriae* Oberth. with *insana* Herr.-Sch. I, however, have not adopted this view because (1) the pattern of the forewing is different and the hindwing is much whiter, and (2) the locality Cape of Good Hope must be taken into account. Although there is, as Hampson says, every probability that this locality is erroneous, yet at the same time we must remember that few if any Lepidoptera came from Algeria in Herrich-Schäffer's time. I therefore prefer to call this form *algeriae* Oberth. and put *insana* Herr.-Sch. under it with a ?.

1 ♀, Hassi Sidi Mahmud, between El Arich and the Oued Nça, April 14; 2 ♂♂, Oued Nça, April 16-30 (1914).

44. *Cerocala sana* Stand.

Cerocala scapulosa var. *sana* Staudinger, *Cat. Lepid. Palaearkt. Faun.* p. 241. No. 2594a (1901) (Syria).

1 ♀, El Alia, between Touggourt and Guerrara, April 12; 1 ♂, El Arich, E. of Guerrara, April 13; 2 ♂♂, 2 ♀♀, Oued Nça, April 16-30 (1914).

Phytometrinae

45. *Phytometra ni deserticola* (Rothsch.)

Plusia ni deserticola Rothschild, *Nov. Zool.* xx. p. 129 (1913) (El Golea).

2 ♀♀, Oued Nça, April 16-13 (1914).

Noctuinae

46. *Anumeta cestis* (Mén.)

Catephia cestis Ménétriés, *Mém. Acad. Impér. St. Pétersb.* vi. p. 290 (74) (1849) (Naruu, Ross. Mer. Or.).

2 ♀♀, Oued Nça, April 16-30 (1914).

[In *Novitates Zoologicae* xx. p. 129 I identified the Algerian subspecies of *A. spilota* (Ersch.) as *Anumeta henkei* (Staud.). On p. 469 of the same volume I described this form as *A. henkei harterti*. I now find that I have referred this form to the wrong species, and it must stand as *Anumeta spilota harterti*, or, as some writers conclude (I disagree), as *Anumeta atosignata harterti*. Sir George Hampson has united my *harterti* with *spilota* as identical, but this is certainly not the case; *harterti* is paler, much more sandy yellow, and the markings are much sharper; it is a good local subspecies. The late Mr. W. Warren in *Seitz*, iii. p. 388 has mixed up my *A. h. harterti* with my *A. major* (*Nov. Zool.* xx. p. 130, No. 79 (1913) (N. of El Golea)). He figures *harterti* and describes *major*, and calls this combination *harterti*. The facts are that *A. major* is a perfectly distinct species, the ♀ of which is the largest of the genus. I have lately received from Herr Geyr von Schwepenburg 10 ♂♂ and 5 ♀♀ from the country round the Hoggar Mountains.]

47. *Aleucanitis philippina* (Aust.)

Leucanitis philippina Austaut, *Le Naturaliste*, 1880, p. 237 (Oran).

Mr. Warren has quite failed to understand the description of Austaut and also the *Staudinger-Rebel Catalogue*. Dr. Hartert's collection contains a ♂ and a ♀ which clearly have the black bar running in from the outer band to the base. *A. philippina* is quite a distinct species and not a form of *A. cailino*.

1 ♂, 1 ♀, Oued Nça, April 16-30 (1914).

48. *Aleucanitis cailino* (Lef.)

Heliothis cailino Lefebvre, *Ann. Soc. Linn. Paris*, 1827, p. 91. t. 5. f. 1 (Sicily).

1 ♂, 1 ♀, Oued Nça, April 16-30 (1914).

49. *Armada panaceorum distincta* subsp. nov.

♂. Much paler than *p. panaceorum*, and the markings on the forewing much more sharply defined. The white patch in the black band of hindwing is also much larger.

1 ♂, Hassi Sidi Mahmud, between El Arich and the Oued Nça, April 14; 3 ♂♂, Oued Nça, April 16-30 (1914).

50. *Apopestes cataphanes roseata* (Rothsch.)

Spintherops roseata Rothschild, *Nov. Zool.* xix. p. 126 (1912) (Ghardaia).

4 ♂♂, 1 ♀, Oued Nça, April 16-30 (1914).

51. *Apopestes dilucida rosea* (Stand.)

Spintherops dilucida var. *rosea* Standinger, *Stett. Entom. Zeit.* xlix. p. 63 (1888) (Biskra).

9 ♂♂, 11 ♀♀, Oued Nça, April 16-30 (1914).

GEOMETRIDAE

Acidaliinae

52. *Glossotrophia romanarioides* (Rothsch.)

Acidalia romanarioides Rothschild, *Nov. Zool.* xx. p. 131. No. 89 (1913) (South Oued Mya).

2 ♂♂, 4 ♀♀, Oued Nça, April 16-30 (1914).

53. *Acidalia luteofasciata* Rothsch.

Acidalia luteofasciata Rothschild, *Nov. Zool.* xx. p. 132. No. 90 (1913) (Oued Nça).

2 ♀♀, Oued Nça, April 16-30 (1914).

Larentiinae

54. *Rhodometra anthophilaria consecraria* (Ramb.)

Sterrhia consecraria Rambur, *Cat. Syst. Lep. And.* t. xx. ff. 5. 6 (1858) (Andalusia).

1 ♀, Oued Nça, April 16-30 (1914).

55. *Lithostege fissurata* Mab.

Lithostege fissurata Mabille, *Bull. Soc. Entom. France*, 1888, p. 58 (Gabès, Tunisia).

1 ♂, El Alia, between Tonggourt and Guerrara, April 12; 1 ♀, El Arich, east of Guerrara, April 13 (1914).

56. *Lithostege? marmorata* Bang-Haas

Lithostege marmorata Bang-Haas, *Iris*, xx. p. 83. t. iii. f. 15 (1907) (Gafsa, Tunisia).

2 ♀♀, El Alia, between Tonggourt and Guerrara, April 12 (1914).

57. *Tephroclystia breviculata* (Donz.)

Melanthia breviculata Donzel, *Ann. Soc. Entom. France*, vi. p. 478. t. 18. f. 7 (1837) (Hyères).

1 ♀, Oued Nça, April 16-30 (1914).

58. *Gymnoscelis harterti* sp. nov.

♂. Antennae black-brown, ciliae greyish; head and body cinnamon-wood-brown.

Forewing: pale cinnamon buff, costal area with seven or eight cinnamon-rufous patches, rest of wing with numerous sinuate cinnamon-rufous transverse lines, suffused and splashed with cinnamon-rufous.

Hindwing: cinnamon-buff almost completely overlaid with cinnamon-rufous patches and lines.

♀. Much larger, creamy whitish grey densely overlaid with pale cinnamon grey lines and patches.

Length of forewing: ♂ 7 mm., ♀ 9 mm.

Expanse: ♂ 16 mm., ♀ 20 mm.

1 ♂, 1 ♀, Oued Nça, April 16-30 (1914).

Boarmianae**59. Zuleika nobiliaria** (Bang-Haas)

Scodionu nobiliaria Bang-Haas, *Iris*, xix. p. 141. t. v. f. 13 (1906) (Gourine, Tunis ♂, Sud Oranais ♀)
1 ♀, Oued Nça, April 16-30 (1914).

Cossidae**60. Cossus aries** Püng.

Cossus aries Püngler, *Iris*, xv. p. 145. t. vi. f. 22 (1902) (Palestine).
1 ♂, 1 ♀, Oued Nça, April 16-30 (1914).

61. Dyspessa ? suavis (Stand.)

Eudagria jordana var. *suavis* Staudinger, *Iris*, xii. p. 355. t. v. f. 7 (1900) (Algeria).

This is quite distinct from *jordana*, and must stand as a good species.

1 ♀, El Arich, east of Guerrara, April 13 (1914).

[Dr. O. Staudinger described and figured a cossid (*Iris*, x, p. 155. t. v. f. 13, 1897) under the name of *Hypopta ? vauloyeri* from Chellala, Algeria. In 1913 Dr. Hartert, Herr Carl Hilgert, and I succeeded in capturing 7 ♂♂ and 16 ♀♀ of this exceedingly rare insect at Ain Sefra, Sud Oranais, in May. I consider that although it is much more hairy than *D. jordana* and *D. suavis* it nevertheless belongs in the same genus. I believe, however, that eventually all three will, together with *asema* Püng., have to be put in a new genus.]

PYRALIDAE**Gallerianae****62. Lamoria anella** (Schiff.)

Tinea anella Schiffermüller, *Syst. Verz. Schmett. Wien*, p. 135 (1776) (Vienna).

4 ♀♀, Oued Nça, April 16-30 (1914).

63. Arenipsis sabella Hmps.

Arenipsis sabella Hampson, *Mém. Lepidop.* viii. p. 501. No. 93. pl. xxiv. f. 1 (1901) (Fao).

2 ♀♀, El Alia, between Tonggourt and Guerrara, April 12 (1914).

Anerastianae**64. Pectinigera hilgerti** sp. nov.

♂. Antennae brownish buff; head, thorax, and abdomen creamy buff.

Forewing: buffish straw-colour, costal area paler.

Hindwing: semivitreous cream-white.

♀. *Forewing*: darker straw-colour, costal area whiter.

Length of forewing: ♂ 15 mm., ♀ 18.5 mm.

Expanse: ♂ 34 mm, ♀ 42 mm.

1 ♂, 5 ♀♀, El Alia, between Tonggourt and Guerrara, April 12 (1914).

65. *Lymire albicostalis* (Rothsch.)

Enosoma albicostalis Rothschild, *Nov. Zool.* xx, p. 138, No. 134 (1913) (S. of El Golea).

Sir George Hampson declared that my *Enosoma albicostalis* and my *Lymire lactealis* were ♂ and ♀, and the insect I put as ♀ of *lactealis* was a *Phycid*. In the present collection are true ♀ ♀ of *lactealis* as well as ♂ ♂ of *albicostalis*, and they are two quite distinct species.

2 ♀ ♀, Hassi Dinar, South of Touggourt, April 11; 9 ♂ ♂, El Alia, between Touggourt and Guerrara, April 12; 1 ♂, El Arich, east of Guerrara, April 13; 1 ♀, Hassi Sidi Mahmud, between El Arich and Oned Nça, April 14; 4 ♂ ♂, 2 ♀ ♀, Oned Nça, April 16–30 (1914).

66. *Lymire strictipennis* sp. nov.

♂. Antennae, head, and thorax wood-grey suffused with buff; abdomen dark buff.

Forewing: wood-brown, costal area pale buff.

Hindwing: semivitreous cream-white.

Length of forewing: 11 mm.

Expanse: 25 mm.

1 ♂, El Alia, between Touggourt and Guerrara, April 12 (1914).

67. *Lymire lactealis* Rothsch.

Lymire lactealis Rothschild, *Nov. Zool.* xx, p. 138, No. 130 (1913) (Igosten).

1 ♀, Hassi Dinar, south of Touggourt, April 11; 4 ♀ ♀, El Alia, between Touggourt and Guerrara, April 12; 1 ♂, 1 ♀, Oned Nça, April 16–30 (1914).

68. *Anerastia ablutella* Zell.

Anerastia ablutella Zeller, *Isis*, 1839, p. 178 (Sicily).

4 ♀ ♀, Oned Nça, April 16–30 (1914).

Crambinae

69. *Eromene ocella* (Haw.)

Palparia ocella Haworth, *Lepid. Brit.* p. 486, No. 21 (1812) (Nr. London).

2 ♂ ♂, Oned Nça, April 16–30 (1914).

Phycitinae

70. *Myelois nivosella* Rag.

Myelois nivosella Ragonot, *Bull. Soc. Entom. France*, 1890, p. eix. (Lambése).

2 ♀ ♀, Oned Nça, April 16–30 (1914).

71. *Myelois osseella* Rag.

Myelois osseella Ragonot, *Ann. Soc. Entom. France*, 1887, p. 226 (Beyrout).

1 ♂, Oned Nça, April 16–30 (1914).

72. *Myelois unipunctella* Chrét.

Myelois unipunctella Chrétien, *Ann. Soc. Entom. France*, lxxix, p. 517 (1911) (Algeria).

1 ♂, Oued Nça, April 16-30 (1914).

73. *Rhodophaea semistrigella* Mab.

Rhodophaea semistrigella Mabilé, *Bull. Soc. Entom. France*, 1908, p. 68 (Tunis).

1 ♂, Oued Nça, April 16-30 (1914).

74. *Nephopteryx cleopatrella* Rag.

Nephopteryx cleopatrella Ragonot, *Ann. Soc. Ent. France*, 1887, p. 231 (Gabés, Tunisia).

4 ♂♂, 2 ♀♀, Oued Nça, April 16-30 (1914).

75. *Nephopteryx genistella* (Dup.)

Phycis genistella Daponceh, *Hist. Nat. Lepid. France*, x, p. 178, pl. 278, f. 4 (1836) (Corsica).

1 ♂, Oued Nça, April 16-30 (1914).

76. *Nephopteryx albovariegata* sp. nov.

♀. Antennae whitish brown: head and thorax yellowish white; abdomen cinnamon-buff.

Forewing: cinnamon-brown, suffused and variegated with white; an oblique antemedian band of orange-cinnamon edged outwardly with white; disc with broad orange-cinnamon longitudinal bands joined to a postdiscal transverse band of the same colour; fringe fuscous-grey.

Hindwing: semivitreous yellowish white, an ill-defined, clondy terminal band of orange-cinnamon. The El Alia ♀ has the orange-cinnamon colour replaced by olive-brown.

Length of forewing: 12 mm.

Expanse: 27 mm.

1 ♀, Hassi Dinar, south of Tonggourt, April 11 (type); 1 ♀, El-Alia, between Tonggourt and Guerrara, April 12 (1914).

77. *Nephopteryx griseola* sp. nov.

♂. Antennae white, closely ringed with dark brown, a blackish comb near base; head and thorax creamy white irrorated with dark grey; thorax buff, variegated with grey and white.

Forewing: white, suffused with buff and densely striated and powdered with sooty slate-grey, an oblique black band from before apex to vein 5.

Hindwing: wood-grey, washed with brown fringe, whitish.

♀. Paler, less striated.

Length of forewing: ♂ 12 mm., ♀ 10 mm.

Expanse: ♂ 27 mm., ♀ 23 mm.

2 ♂♂, 2 ♀♀, Oued Nça, April 16-30 (1914).

78. *Nephopteryx ardesiifascia* sp. nov.

♀. Antennae whitish, closely ringed with sooty brown; head and thorax greyish white, suffused with sooty black; abdomen pale ash-grey.

Forewing: greyish white, densely powdered with sooty slate-grey; a broad oblique antemedian band dark slate-grey; two oblique zigzag dark-slate lines; a broad terminal area brown irrorated with dark slate.

Hindwing: semihyaline white, a brown-grey terminal line from which a few smears of same colour run into wing.

Length of forewing: 13 mm.

Expanse: 29 mm.

1 ♀, Hassi Dinar, south of Tonggourt, April 11; 1 ♀, El Alia, between Tonggourt and Gnerrara, April 12 (1914).

79. *Pristarthria brephiella* (Stand.)

Nephoteryx brephiella Standinger, *Hor. Soc. Entom. Ross*, xv. pp. 193, 194 (1879) (Macedonia).

19 ♂♂, 19 ♀♀, Oned Nça, April 16-30 (1914).

80. *Metalosticha cinnamomea* sp. nov.

♂. Antennae, head, and thorax dark cinnamon; abdomen slightly paler.

Forewing: dark cinnamon; a postmedian black X with the arms partly filled in by a dusting of blackish scales; a brown-black terminal band.

Hindwing: semihyaline cinnamon-buff.

♀. Similar, but larger, and the postmedian X replaced by an irregular patch due to partial suppression of two of the arms of the X.

Length of forewing: ♂ 6.5 mm., ♀ 8 mm.

Expanse: ♂ 15 mm., ♀ 18 mm.

2 ♂♂, 1 ♀, Oned Nça, April 16-30 (1914).

81. *Staudingeria calcariellina* Rothschild.

Staudingeria calcariellina Rothschild, *Nor. Zool.* xx. p. 136. No. 118 (1913) (Hassi-el-Hadjjar).

2 ♂♂, 2 ♀♀, Oned Nça, April 16-30 (1914).

82. *Staudingeria calcariella* Rag.

Staudingeria calcariella Ragonot, *Mém. Lepid. Rom.* viii. p. 135. No. 180. pl. xxviii. f. 13 (1901) (Gabès, Tunisia).

12 ♂♂, 6 ♀♀, Oned Nça, April 16-30 (1914).

83. *Staudingeria griseolella* sp. nov.

♂♀. Antennae brown; head and thorax white, powdered with dark grey; abdomen greyish buff, powdered with grey.

Forewing: white, finely powdered with chocolate-brown, somewhat massed into stripes or bands.

Hindwing: semihyaline buffy white; a brownish terminal line suffused inwards into the wing.

Length of forewing: ♂ 10 mm., ♀ 8 mm.

Expanse: ♂ 22 mm., ♀ 18 mm.

12 ♂♂, 2 ♀♀, Oned Nça, April 16-30 (1914).

84. *Staudingeria albinotella* Rag.

Staudingeria albinotella Ragonot, *Ann. Soc. Entom. France*, 1887, p. 249 (Sharud, Persia).

1 ♂, Oned Nça, April 16-30 (1914).

85. *Staudingeria lacteella* sp. nov.

♀. Antennae, head, thorax, and abdomen cream-white.

Forewing: greyish cream-white; a spot before apex, one at apex of and one in cell, a line on vein 1 and a slightly broken terminal line black-brown.

Hindwing: semihyaline greyish, white-terminal line darker.

Length of forewing: 8.5 mm.

Expanse: 19 mm.

1 ♀, Oued Nça, April 16-30 (1914).

86. *Heterographis deserticola* (Stand.)

Myeloides deserticola Standinger, *Berl. Entom. Zeit.* xiv. p. 201. No. 39 (1870) (Sarepta).

3 ♂♂, 2 ♀♀, El Alia, between Touggourt and Guerrara, April 12; 1 ♂, Hassi Sidi Mahmud, between El Arich and Oued Nça, April 14; 1 ♂, 1 ♀, Oued Nça, April 16-30 (1914).

87. *Heterographis convexella* Led.

Heterographis convexella Lederer, *Verh. zool.-bot. Gesell. Wien*, 1855, p. 222. t. 4 f. 9 (Syria).

1 ♂, Oued Nça, April 16-30 (1914).

88. *Heterographis cinuamomeifascia* sp. nov.

♂. Antennae, head, thorax, and abdomen cinnamon.

Forewing: deep brown; costal area, an oblique antemedian band, subterminal band, fringe, a line above vein 1, and outer two-thirds of inner margin cinnamon.

Hindwing: semihyaline white outer two-fifths marked with pale cinnamon.

Length of forewing: 8.5 mm.

Expanse: 19 mm.

1 ♂, Hassi Dinar, south of Touggourt, April 11 (1914).

89. *Ancylosis ustella* Rag.

Ancylosis ustella Ragonot, *Ann. Soc. Entom. France*, 1887, p. 252. No. 141 (Sebdou).

1 ♂, 1 ♀, Hassi Dinar, south of Touggourt, April 11; 1 ♂, Oued Nça, April 16-30 (1914).

90. *Ephestia kuehniella* Zell.

Ephestia kuehniella Zeller, *Stett. Entom. Zeit.* xl. p. 466 (1879) (Germany).

1 ♀, Hassi Dinar, south of Touggourt, April 11 (1914).

91. *Syria arenosella* (Stand.)

Anerastia arenosella Staudinger, *Stett. Entom. Zeit.* xx. p. 227. No. 40 (1859) (Chiclana).

1 ♂, Oued Nça, April 16-30 (1914).

92. *Diviana pallidimarginalis* sp. nov.

♂♀, Antennae whitish brown with slightly darker rings; thorax brownish buff; abdomen pale buffy brown.

Forewing: brownish buff with a creamy band occupying costal area for basal

half of wing, from whence it widens to third of breadth of wing just before apex ; a few scattered dark scales on disc and an incomplete dark subterminal band.

Hindwing : semivitreous cream-buff.

Length of forewing : 10.5 mm.

Expanse : 23 mm.

1 ♂, Oued Nça, April 16-30 ; 1 ♂, 1 ♀, Hassi Dinar, south of Tonggourt, April 11 (1914).

93. *Homeosoma nimbella* (Zell.)

Anerastia nimbella Zeller, *Isis*, 1839, p. 178 (Glogan).

♂. *Forewing* : buffish cream ; two antemedian dark-grey spots and a post-discal dark-grey band, rest of wing slightly sprinkled with grey scales.

Hindwing : semivitreous grey paler towards base, fringe white.

Length of forewing : 10 mm.

Expanse : 22 mm.

1 ♂, Oued Nça, April 16-30 (1914).

Pyalinae

94. *Aglossa rhodalis* Hampsn.

Aglossa rhodalis Hampson, *Ann. Mag. Nat. Hist.* (7) xvii. p. 218 (1906) (Cape Colony).

1 ♀, El Alia, between Touggourt and Gnerrara, April 12 ; 6 ♂♂, 2 ♀♀, Oued Nça, April 16-30 (1914).

95. *Aglossa rubralis* Hampsn.

Aglossa rubralis Hampson, *Trans. Entom. Soc. Lond.* 1900, p. 378. No. (1a) (Syria).

2 ♂♂, 1 ♀, Oued Nça, April 16-30 (1914).

96. *Aglossa tenebrosalis* sp. nov.

♂. Antennae buff ringed closely with black-brown and with very long pectinations diminishing sharply on distal third ; head and thorax chocolate-brown powdered with buff ; abdomen brownish buff very sparsely freckled with brown.

Forewing : buff ; eight chocolate patches in costal region ; rest of wing densely suffused with patches of chocolate scales almost obliterating buff ground-colour and producing an effect of heavy clouding.

Hindwing : greyish buff costal and terminal areas clouded with brown.

Length of forewing : 15 mm.

Expanse : 34 mm.

1 ♂, Oued Nça, April 16-30 (1914).

97. *Aglossa harterti* sp. nov.

♂. Antennae pale cinnamon ; head, thorax, and abdomen rusty cinnamon.

Forewing : rusty cinnamon ; a row of buff spots along basal three-quarters of costa, a strongly curved antemedian band buff with some patches of deep rufous along its edges, a deep rufous stigma near apex of cell, a postmedian buff band edged inwardly and somewhat ill-definedly with dark rufous.

Hindwing : greyish buff indistinctly banded with a darker shade.

♀. Similar, but thorax dark rufous-cinnamon and abdomen pale cinnamon.

Forewing : deep rufous-cinnamon with markings less sharply defined.

Length of forewing : ♂ 13-15 mm., ♀ 11-14 mm.

Expanse : ♂ 29-33 mm., ♀ 25-31 mm.

3 ♂♂, 8 ♀♀, Oued Nça, April 16-30 (1914).

98. *Ulotricha algerialis* Hampsn.

Ulotricha algerialis Hampson, *Trans. Entom. Soc. Lond.* 1900, p. 377. No. (2) pl. iii. f. 18 (Biskra).

1 ♀, El Alia, between Tougourt and Guerrara, April 12; 3 ♂♂, Oued Nça, April 16-30 (1914).

99. *Constantia canifusalis* Hampsn.

Constantia canifusalis Hampson, *Trans. Entom. Soc. Lond.* 1900, p. 381, pl. iii. f. 16 (Biskra).

1 ♀, Hassi Dinar, south of Tougourt, April 11; 1 ♀, El Alia, between Tougourt and Guerrara, April 12; 2 ♂♂, 1 ♀, Oued Nça, April 16-30 (1914).

100. *Cledeobia chellalalis* Hampsn.

Cledeobia chellalalis Hampson, *Trans. Entom. Soc. Lond.* 1900, p. 383 (Algeria).

7 ♂♂, 3 ♀♀, Oued Nça, April 16-30 (1914).

Hydrocampinae

101. *Nymphula bleusei* (Oberth.)

Synclera bleusei Oberthür, *Bull. Soc. Entom. France*, 1887, p. lxxxii. (Biskra).

7 ♂♂, Oued Nça, April 16-30 (1914).

Pyraustinae

102. *Nomophila noctuella* (Schiff.)

Pyralis noctuella Schifferrmüller, *Syst. Verz. Schmett. Wien*, p. 136 (1776) (Vienna).

6 ♂♂, 5 ♀♀, Oued Nça, April 16-30 (1914).

103. *Evergestes renatalis* (Oberth.)

Orobena renatalis Oberthür, *Bull. Soc. Entom. France*, 1887, p. xcix. (Bou Saada, etc.).

1 ♂, Oued Nça, April 16-30 (1914).

104. *Metasia pseudobotys* Rothscl.

Metasia pseudobotys Rothschild, *Nor. Zool.* xx. p. 141. No. 154 (1913) (South Oued Mya).

1 ♀, Oued Nça, April 16-30 (1914).

105. *Cornifrons ulceratalis* Led.

Cornifrons ulceratalis Lederer, *Wien. Entom. Monatschr.* 1858, p. 147. t. 4. f. 1 (Syria).

1 ♂, Hassi Dinar, south of Tougourt, April 11; 2 ♀♀, El Alia, between Tougourt and Guerrara, April 12; 3 ♂♂, 5 ♀♀, Oued Nça, April 16-30 (1914).

106. *Noctuelia floralis* (Hübner)

Pyralis floralis Hübner, *Samml. Europ. Schmett., Pyr.* f. 142 (1793-1827) (Europe).

1 ♂, 1 ♀, Ghardaia, May 1-3 (1914).

107. *Noctuelia anaemicalis* Hampson.

Noctuelia anaemicalis Hampson, *Trans. Entom. Soc. Lond.* 1900, p. 400. t. 3. f. 28 (Biskra).

1 ♂, 1 ♀, El Alia between Touggourt and Gherrara, April 11; 4 ♂♂, 1 ♀, El Arich, east of Guerrara, April 13; 1 ♂, 1 ♀, Hassi Sidi Mahmud between, Guerrara and Oued Nça, April 14 (1914).

108. *Noctuelia desertalis* (Hübner)

Pyralis desertalis Hübner, *Samml. Europ. Schmett., Pyr.* f. 171 (1793-1827) (Europe).

5 ♂♂, 7 ♀♀, Oued Nça, April 16-30 (1914).

109. *Noctuelia allardalis* (Oberthür)

Orobena allardalis Oberthür, *Bull. Soc. Entom. France*, 1887, p. 99 (Ain Sefra).

3 ♂♂, 2 ♀♀, Oued Nça, April 16-30 (1914).

110. *Noctuelia hilgerti* sp. nov.

♀. Antennae brown; head, thorax, and abdomen buffy white.

Forewing: sandy buff, somewhat suffused with white in central one-third; an antemedian somewhat indistinct curved brown band, a discocellular black stigma, a postmedian sinuate band of coalescent black spots, a broken black terminal line, fringe whitish.

Hindwing: buff, an obsolescent brown postmedian band and a black-brown terminal line.

Length of forewing: 8-10 mm.

Expanse: 19-23 mm.

2 ♀♀, Hassi Dinar, south of Touggourt, April 11 (1914).

111. *Noctuelia affinis* sp. nov.

♂. Nearest to *anaemicalis* Hampson. Antennae dark grey; head, thorax, and abdomen cream-white, thorax freckled with grey.

Forewing: basal three-quarters cream-colour densely powdered with olive-brown, outer one-quarter pale blue-grey, a subterminal line black.

Hindwing: yellowish wood-grey.

Length of forewing: 7 mm.

Expanse: 16 mm.

1 ♂, Oued Nça, April 16-30 (1914).
